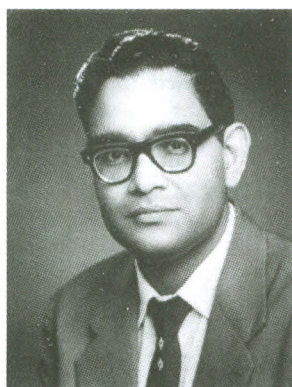


## Professor Uttamchand Khimchand Sheth

(1920–2000)



Professor Uttamchand Khimchand Sheth, a renowned pharmacologist, popularly known as UKS, passed away in Mumbai on 29 July 2000. In his death, Indian science lost a founder of Clinical Pharmacology.

UKS had a brilliant and varied career. After his BSc in Microbiology, he joined Seth G.S. Medical College (GSMC) for his MB, BS and later MD in medicine. On completing his medical residency, he joined the Department

of Pathology at T.N. Medical College (TNMC), Mumbai. He was an assistant professor from 1950 to 1953. Later, he shifted to the Department of Pharmacology at TNMC and became its head. When Professor Roger Lewis left the Department of Pharmacology at GSMC, UKS happily moved over to his alma mater as professor and head of the department (1956–73) and then as Director Professor (1973–78). After his retirement from GSMC, he became a World Health Organization (WHO) consultant in Pharmacology for Nepal (1979–81). For eight years thereafter, he occupied the position of the WHO consultant for malaria and filariasis. On completing the WHO assignment he became Professor Emeritus at the Bharatiya Vidya Bhavan's Swami Prakashananda Ayurveda Research Centre (SPARC), Mumbai and a senior advisor to the Department of Clinical Pharmacology at GSMC.

When he was awarded the Rockefeller Foundation Fellowship, he went to the USA and worked with Professor Herb Borison in Professor L. S. Goodman's department. Their research on pyrexia with intraventricular injection of bacterial lipopolysaccharide into the cat brain was a trail-blazer. Feldberg, at London, who used this method to inject neurotransmitters and antagonists, expressed his indebtedness to Sheth and Borison for the approach. Tremendous work on the central nervous regulation of temperature (Myers), reproduction (Schally), circulation (Bhargava) followed. I—a student of UKS—showed, with Levine, that serotonin (5-hydroxytryptamine) plays a role in temperature regulation in humans, as its depletion led to hypothermia.

On his return from the USA, UKS pioneered the experimental and clinical pharmacology of diuretics, with eminent colleagues such as Dilip Mehta, N. K. Bhide, M. J. Shah and Kisan Modi. Dilip Mehta, who had worked with Professor Harry Gold's Department of Human Pharmacology at Cornell, helped UKS to start the first Clinical Pharmacology Unit in India. I was its first research fellow. Late Sri Amrit Mody of Unichem helped UKS throughout in his efforts; the dean Dr S. V. Joglekar was very supportive too. Under the leadership of UKS, the unit grew rapidly, flowering into the first Council of Scientific and Industrial Research (CSIR) unit for clinical drug trials. Later CIBA-GEIGY supported the unit for phase 1 studies.

UKS felt proud that his student Professor Neelima Kshirsagar headed the Department of Clinical Pharmacology at GSMC. This has now shifted to TNMC and is recognized as an Advanced Centre of the Indian Council of Medical Research (ICMR) for Clinical Pharmacology. The Department of Pharmacology at GSMC is now

headed by another eminent student of UKS, Professor Sharadini Dahanukar, who has done outstanding work on medicinal plants and *Rasayan*s. This too is recognized as 'an Advanced ICMR Centre'. During the tenure of UKS at GSMC, the academia–industry collaboration grew from strength to strength. Phase 1 and 2 studies, pharmacokinetics and pharmacodynamics were established. GSMC became the premier institute for clinical pharmacology in the world. Scientifically, these were the most productive days of UKS and his students and colleagues.

Several new drugs were developed. A triazine diuretic was taken up in the USA and developed into a world drug—triamterene—a potassium-sparing diuretic. Diethylcarbamazine was used for tropical eosinophilia and spironolactone of Searle was rationalized as regards its dose. Satranidazole (GO 10213), synthesized by Nagarajan and Arya at the CIBA Research Centre is even now the most effective and well tolerated drug for amoebiasis and trichomoniasis. This has been recently marketed as Satrogyl by Alkem. But the acme of UKS's research career was his dynamic role in the clinical development of mefloquine for malaria, which has saved innumerable lives of patients with chloroquine-resistant malaria. Roche has yet to honour UKS.

In India, UKS was honoured and recognized during his lifetime. He was awarded the prestigious Shanti Swaroop Bhatnagar Prize in Medicine for Pharmacology in 1968. He also received the Amrit Mody Award in 1971 and the Dr B. C. Roy Award in 1978. He was invited to deliver orations at several conferences, institutes and academies. He was elected a Fellow of the American College of Clinical Pharmacology and Chemotherapy and the American Therapeutic Society. He was elected president the Indian Pharmacology Society and the Indian Society for Clinical Pharmacology and Therapeutics. He was invited to the Clinical Pharmacology Section of the International Union for Pharmacology.

He edited several journals in India and wrote a couple of textbooks on pharmacology. He was on the editorial boards of several journals. He played a pivotal role for clinical pharmacology in universities, research councils and drug advisory boards. His recommendation to the NCST that Clinical Pharmacology professorships need not be established in India hurt several careers and the discipline. He tried to undo this damage later by supporting a separate department for clinical pharmacology at GSMC.

UKS had more than 350 scientific publications to his credit, almost half of them based on experimental research. But above all UKS will be remembered as a teacher par excellence. He made a dull subject like pharmacology very interesting and useful. I still have my notes that I took down in 1956. His background in microbiology, pathology and general medicine helped him to teach therapeutics-oriented pharmacology to undergraduates and postgraduates. More than 100 students received their MSc, MD or PhD while working with him.

UKS had versatile interests—music, drama, poetry, photography, painting, sculpture, international cuisine. He loved the good things of life. He is survived by his wife Mrs Sushila Sheth and son Dr Anil Sheth. UKS once told me at an over-effusive condolence meeting that one should not paint a larger-than-life picture of one whom one admires. I hope I have respected my teacher's desires.

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